

Extension Area 14: Economic Overview

Carroll, Harrison, Jefferson, and Tuscarawas Counties

Report prepared **March** 2023 by Amanda Osborne, Extension Educator, OSU Extension Community Development

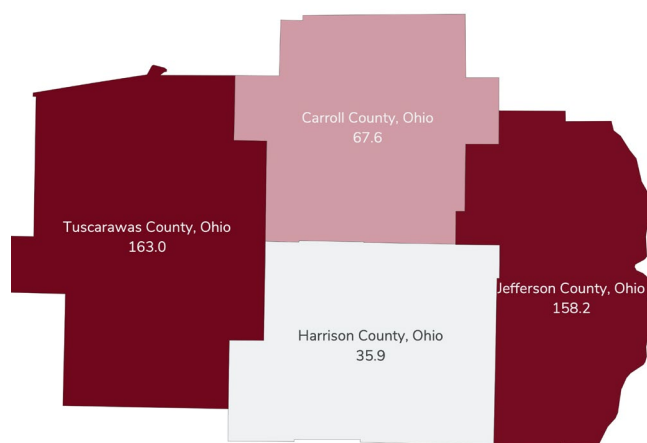
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Regional Overview

OSU Extension Area 14 is a four-county area in the eastern part of the state, including Carroll, Harrison, Jefferson, and Tuscarawas counties. In 2021, the combined Area 14 footprint is 1,776 square miles (mi²) supporting a population of 198,457 residents and an overall population density of 112 residents per square mile. Population density is a ratio of total population to total land area, simply described as a count of residents per square mile. As illustrated in Image 1, Tuscarawas County has the highest population density of 163, followed by Jefferson County with a population density of 158, while Harrison, and Carroll counties ranged between 36 to 68 residents per square mile.

Overall, the combined population in Area 14 has remained consistent decreasing slightly by -5% from 208,893 in 2001 to a total population of 198,457 in 2021. However, there were some notable shifts in the population trends of individual counties between 2001 and 2021. Jefferson County experienced the greatest amount of decline as the population decreased by -11.1% from 72,855 in 2001 to 64,789 in 2021. During this period, Carroll County underwent a population decrease of -8.2% to a total of 26,691 in 2021, while Harrison County had a population decrease of -8.9% to a total of 14,477 in 2021. Between 2001 and 2020, Tuscarawas County was the only county to see a population increase (1.6%) to a total of 92,500 residents in 2021.

Image 1: OSU Extension Area 14 Population Density



Key Stats

Population 198,457

Total of 326 Industries

Total Employment of 89,009

Gross Domestic Product \$8.93B

Data retrieved from IMPLAN
(2021 data)

Regional Industry Sector Overview

IMPLAN defines the total annual production value of each Industry or Commodity as Output. Total output represents the total production value of an industry including intermediate inputs, employee compensation, proprietor income, taxes on production and imports, and other property income.

Table 1 below ranks the top 10 industries in Area 14 by total output in 2021. Oil and gas extraction was the highest ranked industry with a total output of \$900 million, supporting 328 jobs, and an average employee compensation of \$121,326. When comparing 2021 to 2020, the data shows the oil and gas extraction industry experienced a

46.2% increase in total output, but also a decrease in total employment from 342 in 2020 to 328 jobs in 2021.

The industry with the second highest total output in Area 14 was owner-occupied dwellings with a total output of \$785 million. The owner-occupied dwellings sector represents the wealth generated from home ownership. Owning and maintaining a home is also a major area of spending and the owner-occupied dwellings sector captures that economic effect. However, there is no employment or labor income generated in the owner-occupied dwellings sector, as the employment positions such as property managers

and real estate agents is captured in the other real estate sector.

The industry with the third highest total output was other basic organic chemical manufacturing with a total output of \$636 million, supporting 479 jobs, and an average employee compensation of \$125,547 per year.

Of the top 10 industries by total output, the sector with the most employees in the region was employment and payroll of local government and education with 5,696 employees. The average annual income for these workers was \$61,252 per year.

Table 1: Area 14 Top 10 Industries by Total Output

Industry Description	Output	Total Employment	Average Employee Compensation
Oil and gas extraction	\$900,692,506	328	\$121,326
Owner-occupied dwellings	\$785,194,310	N/A	N/A
Other basic organic chemical manufacturing	\$636,940,629	479	\$125,547
Electric power generation - Fossil fuel	\$590,042,663	373	\$193,092
Iron and steel mills and ferroalloy manufacturing	\$522,635,195	522	\$110,539
Other real estate	\$473,936,793	2,797	\$46,073
Hospitals	\$466,820,876	2,498	\$83,407
Employment and payroll of local govt, education	\$400,818,910	5,696	\$61,252
Petroleum refineries	\$382,847,565	42	\$169,221
Monetary authorities and depository credit intermediation	\$364,464,299	706	\$59,604

Area 14 Annual Employment Trends

The Total Employment figure reported by IMPLAN represents a full and part-time annual average including the self-employed, all federal, state, and local government employment and military employment (including overseas military).

Chart 1 provides a visual reference of the Area 14 annual employment trends between 2001 and 2021. As shown in the chart, Area 14 experienced consistent growth between 2002 and 2007 when the U.S. housing market collapsed, stressing global financial markets, and ultimately triggering the U.S.

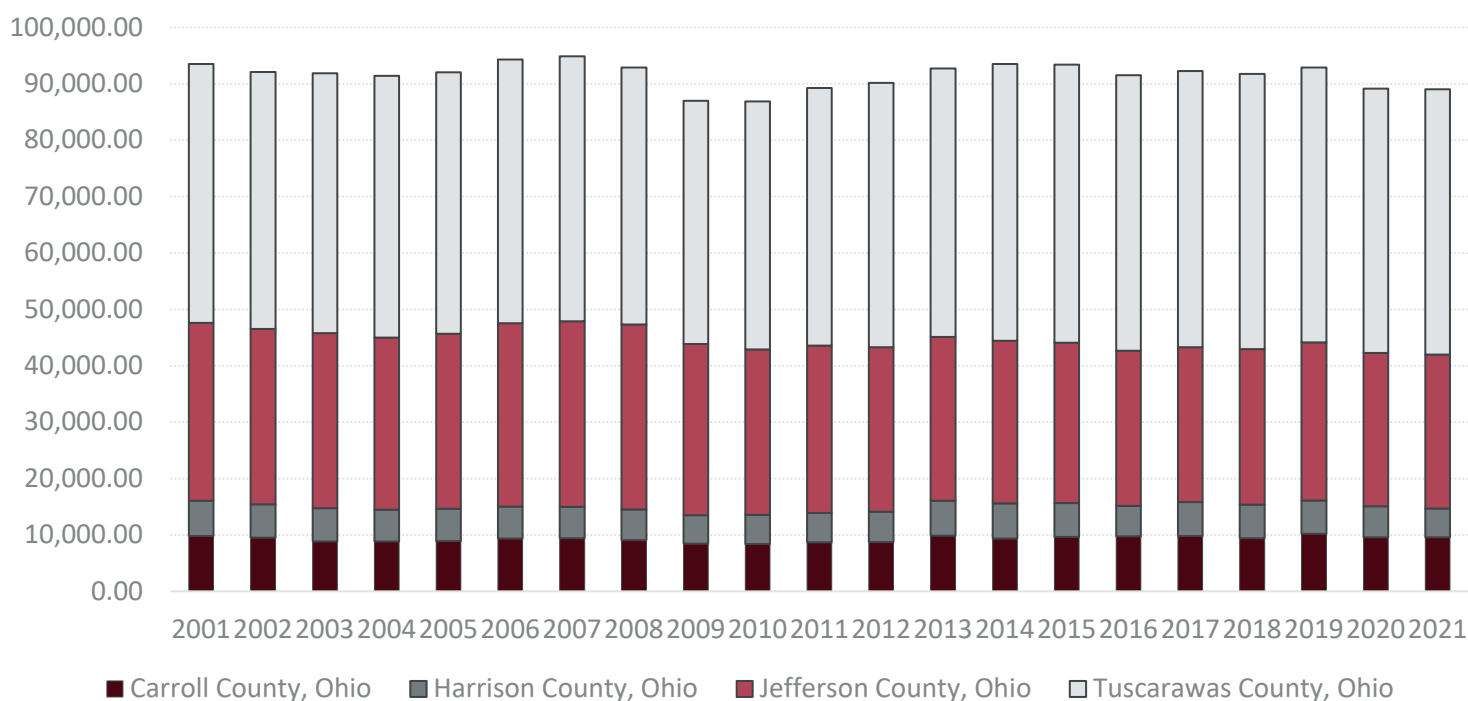
economy into a period of recession. Since 2001 annual employment in Area 14 decreased by -4.8% reaching a peak employment of 94,850 jobs in 2007. However, between 2019 and 2020 Area 14 experienced the greatest year to year job loss, losing 3,722 jobs, leaving an annual employment of 89,149 in 2020. From 2020 to 2021, another 141 jobs were lost.

When considering the long-term employment trends by county, Harrison County saw the greatest decline in total employment of -17.8%, decreasing from 6,213 in 2001 to 5,104 in 2021. Similarly,

“Year-to-year, Area 14 total employment is down 141 Jobs in 2021”

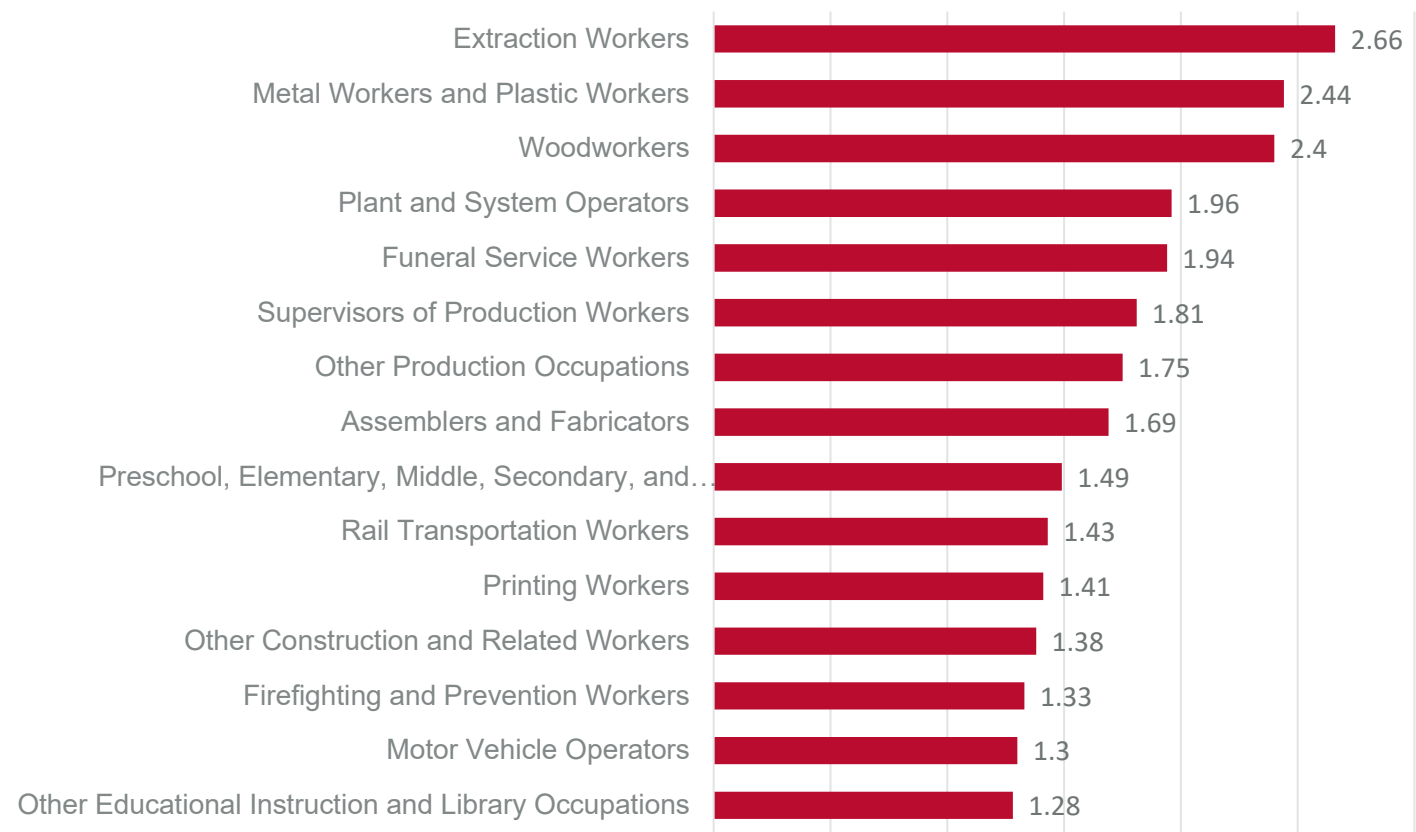
Jefferson County total employment decreased by -13.6%, from 31,542 jobs in 2001 to 27,265 in 2021. During the same period (2001–2021) two of the counties in Area 14 experienced a smaller changes in total employment including Carroll County (-2.4%) and Tuscarawas County (2.4%).

Chart 1: Area 14 Annual Employment



Top 14 Occupations by Location Quotient

Chart 2: Occupation Location Quotient



A location quotient (LQ) is a metric that compares the relative concentration of a local regions workers in a specific industry sector to the concentration of workers nationally in the same sector. An LQ equal to 1 signifies that the local share is equal to the national share, while an LQ greater than 1 means the local share is greater than the national share and is typically an exporter or perhaps has a specialization in that sector. Where there is an occupational concentration, there also tends to be higher core competencies relative to other areas, creating a competitive advantage. In addition, training and education opportunities associated with the occupation are often readily available to meet hiring demands.

Illustrated above, Chart 2 lists the top 15 occupations with the highest LQ in Area 14 demonstrating a significant concentration of workers relative to the nation. In 2021, the top occupation by LQ in Area 14 was extraction workers, with an LQ of 2.66. This suggests the region has more than two times the number of extraction workers compared to the national average. The second highest occupation by LQ in Area 14 was metal and plastic workers at 2.44, followed by woodworkers with an LQ of 2.4, and plant and systems operators at 1.96.



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